Does prognosis and socioeconomic status impact on trust in physicians? Interviews with patients with coronary disease in South Australia

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ABSTRACT
Objectives: There is concern across a range of healthcare settings worldwide that trust in physicians is declining. Decreased trust may lead to lesser tolerance of prognosis uncertainty and an increased demand for tests, referrals and second opinions. Literature suggests that there has been a recent cultural shift towards decreased trust in, and increased questioning of, medical advice. We investigated the impact of varying prognosis and socioeconomic status (SES) on trust in physicians, and patient questioning of medical advice.

Design: Semistructured, audio-recorded transcribed interviews were conducted. The interview schedule was developed with reference to the Health Belief Model. Interviews were conducted between October 2008 and September 2009.

Setting: Participants were recruited via general practitioner clinics and hospital cardiac rehabilitation programmes.

Participants: Participants consisted of patients either receiving preventive treatment or active treatment for established cardiovascular disease.

Outcome measures: A coding structure was developed based on the aim of the research, to investigate the impact of varying prognosis and SES on trust in physicians.

Results: Older participants are more likely than their younger counterparts to be unquestioning of medical advice. Higher SES participants are more likely to question medical advice than lower SES participants. Also, unlike primary prevention participants, established pathology increased participants’ trust, or decreased questioning behaviour. Participants who perceived themselves at risk of a poor or uncertain outcome were unlikely to doubt medical advice.

Conclusions: Blind trust in physicians remains strong in older participants, participants who perceive their prognosis to be uncertain and a proportion of lower SES participants. This is important for practitioners in terms of patient agency and points to the importance of moral and ethical practice. However, physicians also need to be aware that there are a growing proportion of patients for whom trust needs to be developed, and cannot be assumed.

INTRODUCTION

There is concern across a range of healthcare settings worldwide that trust in physicians is declining.1–8 Decreased trust may lead to lesser tolerance of uncertainty with an increased demand for tests, referrals and second opinions.5 This potential decline in patient trust has been extensively described in the literature.9–12 Literature suggests that there has been a recent cultural shift towards decreased trust in, and increased questioning of, medical advice. Increased access to medical information via technology has nurtured lay recognition of the accessibility of
healthcare information and forms of self-help. A proportion of the lay populace are increasingly better informed, seeking to take back control over their own lives through the rejection of certain aspects of technology (eg, the growth of complementary and alternative medicine) or through self-care.

However, the argument that the lay populace are information seeking and evermore distrusting of physicians has been contested. Indeed, there is evidence to suggest that trust in physicians remains strong, which may be due to the fact that the will or capacity to question medical advice is not equal in all patients. Many patients blindly trust. For example, Lupton (p. 125) has suggested that certain demographics have been associated with ‘unquestioning’ behaviours: those who are socio-economically disadvantaged have less access to education, resources and such publications as consumer guides compared with people of greater socio-economic advantage. In addition, it has been suggested that patient medical circumstances (nature of condition and prognosis) impacts on the likelihood that a patient will question medical advice.

Trust may be seen as ‘the mutual confidence that no party to an exchange will exploit the other’s vulnerability’, with the truster being required to ‘accept the risks associated with the type and depth of the interdependence inherent in a given relationship’. In this article, we focus on the notion of ‘blind trust’, which implies a lack of questioning on the part of the ‘truster’. Blind trust may be understood as trust that is expressed without caution; trust that renders the truster vulnerable to adverse consequences. Therefore, the investigation of patient trust is important as a backdrop to physician–patient relationships because in at least a proportion of these relationships, there is a level of patient vulnerability, inability or unwillingness to question decisions taken on their behalf.

On reviewing the literature, we aimed to investigate the impact of varying prognosis and socioeconomic status (SES) on trust in physicians. This study involved participants with a chronic condition—cardiovascular disease (CD). Some participants had established pathology and others were receiving preventive treatments. It was anticipated that people at different points in the disease trajectory might have different experiences and expectations of physicians, and thus participants views may differ significantly depending on the degree to which they were concerned about the risks associated with their physical condition.

METHODS
The consolidated criteria for reporting qualitative research (COREQ) are used to describe our methods. Participants were purposely sampled from a population of people undergoing primary prevention (patients taking statins) and secondary prevention (patients who had ischaemic coronary disease). Participants were recruited through South Australian cardiac rehabilitation programmes and South Australian general practitioner (GP) surgeries. One hundred patients were contacted by their GP regarding the research and the primary author attended four cardiac rehabilitation centres (roughly 20 participants in each) to recruit participants. Potential participants were given an information package that included an information sheet, a letter of introduction, consent form and a survey asking participants for their demographic details. No remuneration was offered for participation in the study.

The sampling was stratified according to SES, given the hypothesis regarding the role of SES in questioning behaviours. Participants were sampled from 33 different Adelaide, Australia postcodes for variation with regard to SES. Individuals were identified as lower SES if they had an annual household income of less than $30 000 (Australian dollars). In situations where income was not stated by participants, education and IRSD (Index of Relative Socioeconomic Disadvantage) were used to estimate SES. Participants with high-school education living in disadvantaged areas were identified as lower SES in relation to participants in more advantaged areas with TAFE (Training and Further Education) or university education.

Participants were interviewed by the primary author (female, PhD student at the time of data collection) between October 2008 and September 2009. The research presented in this paper formed part of the primary author’s PhD. Her experience with interviewing was substantial due to her honours research. The primary author had no prior relationship with any of the participants, but they were aware of the aim of the research prior to data collection. Interviews were audio-recorded, transcribed and conducted at participants’ convenience. Field notes were also taken following the interview but were used for reflection of the research process rather than as data. The interview consisted of 15 open-ended questions designed to investigate patients trust/distrust. These questions were used to investigate participants trust in, and compliance with, dietary (lifestyle) and medical advice they had received from medical professionals with regard to CD (see the supplementary file for the interview guide). The questions were developed with reference to the Health Belief Model (HBM), which postulates that a person is more likely to take a health-related action (for the purpose of this research, comply with medical advice) if that person:

1. feels that a negative health condition can be avoided (in this case the consequences of CD),

These 15 questions were part of a larger 32 question interview guide which also investigated patient trust in the health care system and additional sources of dietary recommendations (other than medical professionals). Authors interested in viewing the complete interview guide are invited to contact the corresponding author.
2. has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (ie, death or a cardiovascular incident), and
3. believes that he/she can successfully take a recommended health action (ie, he/she can comply with medical advice comfortably and with confidence).

Based on the HBM, we designed an interview guide that investigated trust by asking participants about health behaviours and how/if trust influenced these behaviours. Within this paper, we demonstrate that the use of the HBM (specifically, point 2 noted above) allowed us to investigate whether prognosis or SES impacts trust (a positive expectation) and consequently, compliance with medical advice. All respondents were asked identical questions in the same sequence; however, the interview schedule was modified as new themes emerged. The interview questions were piloted prior to data collection. After the pilot the order of the questions was altered slightly, as was the wording. Interviews were conducted at participants’ homes or at a location of their choice (café, over a picnic) and lengths varied from 30 min to 2 hrs depending on the participant. During three of the interviews the partner of the participant was present (men; ages 58, 62, 68). No repeat interviews were carried out and participants were not given transcripts or findings for review.

NVivo was used for the analysis of the data. A coding structure was developed based on the aim of the research, to investigate the impact of varying prognosis and SES on trust in physicians. A deductivist philosophy was used to guide our methodology, in that we were interested in further exploring the utility of social theory on trust, but not testing in a quantitative or statistical manner. In this way, we developed an interview schedule from sociological theory on trust, in conjunction with the HBM, in order to assess its relevance within our data. This approach may be seen as ‘deductive’, although we were highly cognisant of not trying to ‘force’ our data to fit the conceptual model. In order to implement this strategy, our initial stage of analysis involved open coding, which meant describing the words, events or phrases of participants, whether or not they fitted into our conceptual framework. Open coding is an iterative process that involved highlighting or pulling out words or sections of text that appeared significant to the participants within the interviews. The next stage of analysis involved categorising the data in order to make links between the codes and make sense of the key themes. To increase analytical rigour, the emerging themes were discussed and debated by the research team to arrive at consensus. After the development of themes, the final stage involved making links between the themes and the conceptual framework. This stage helped us to understand ‘where’ and ‘how’ the theory explained patient trust. One example of this surrounds our interpretation of a theme on ‘lack of questioning’. A lack of questioning of medical advice from physicians (the theme) was considered as evidence of blind trust (from the conceptual framework), while questioning was considered evidence of not blindly trusting.

Research ethics approval was obtained from Flinders University Social and Behavioural Research Ethics Committee (Approval number 4245) prior to the commencement of the study. All respondents provided further consent prior to data collection and were given pseudonyms in order to ensure confidentiality.

RESULTS
The participants were 22 men and 15 women with ages ranging from 32 to 80 years of age; 19 secondary prevention and 18 primary prevention. Recruitment ceased when saturation of themes was achieved.

The findings below draw attention to the differences in participant’s level of questioning when provided medical advice from their physicians (stratification according to primary and secondary prevention CD and SES). In addition to the areas under investigation, the findings highlight age as a factor associated with questioning behaviour. As such, differential findings with regard to age are also identified below.

Primary CD prevention participants
In contrast to lower SES participants, higher SES participants in primary prevention were found to be more questioning of medical advice, and less likely to blindly trust. For example, higher SES couple M3 (aged 66) and F2 (aged 57), said that 10 years ago people just trusted in ‘people with some sort of authority’ (including physicians) but that there seems to be a change in ‘people’s attitudes’ regarding professionals. M2 and F3 said that they are much more likely to question medical advice from professionals than they were 10 years ago. Conversely, lower SES participants F9 (aged 72), F13 (aged 72), F11 (aged 77), M10 (aged 76) and M11 (aged 75) are unquestioning of medical advice. F11 said:

You know, so I mean, I think probably, I think with our generation, because we were brought up respecting doctors, teachers and policeman—so anybody coming by who’s in a white coat could say anything to you and you’d trust them. I don’t think, query about it much. You know, so. So yes I suppose that is a matter of trust.

F11 would trust anyone in a white coat because she grew up seeing physicians as authority figures that deserve respect.

The differences between higher and lower SES primary prevention patients may also be explained by participants’ ages. Participants aged ≥70 were consistently more likely to trust, and less questioning of all medical professionals. For example, M2 (aged 76, lower SES) suggested that healthcare professionals should be trusted because they are the experts: ‘you’ve gotta trust somebody somewhere. And I think your doctor is the
First step on the line’. Similarly, F12 (aged 73, lower SES) said she trusts physicians because ‘I trust them, hen. Well you do—you put your life in their hands. They know what they’re doing—you don’t. I would trust them all’. F12 is suggesting she blindly trusts all physicians.

The suggestion that age, independently or along with SES, impacts patients’ questioning behaviour is supported by M7’s responses. M7, age 50, is questioning of medical advice despite being lower SES. When asked if he trusts his GP he replied: ‘I got to learn to trust him’ and that his trust developed over time rather than being blind.

The findings from primary prevention participants suggest that overall, higher SES participants and younger participants are more likely to question professional advice.

**Secondary CD prevention participants**

Consistent with findings of primary prevention participants, older participants (≥70) in secondary prevention were more likely to trust all medical professionals, regardless of their SES. The findings also identified that participants who consider their prognosis to be uncertain are less questioning of medical advice. Additionally, inconsistent with the findings from primary prevention, participant SES was not found to dictate questioning behaviour in secondary prevention participants.

Several of the lower SES secondary prevention participant responses indicated that they are questioning of medical advice. For example, M8 (aged 58, lower SES) discussed in detail why he trusts his physician:

> …he’s always explained—look whatever I’ve gone to see him for he’s explained, he’s gone into details. He, he doesn’t write anything off without doing tests for, for further examinations—whatever. And through the process of elimination as opposed to my previous GP who had the approach of, ‘ah it’s nothing—you’ll be alright’.

However, other lower SES participants were unquestioning of medical advice. For example, M20 does not question medical professionals because they are the experts:

> …of course I would put my, put my life into him as I did with the surgeon of course being, being the man with the brains he’s obviously got and he knows exactly about the heart. He knows exactly what to do and what to say anyway.

M20 may differ to lower SES participant M8 because at the time of the interview, M20 was very concerned about his medical circumstances. His myocardial infarction came as a shock to him and during the time of the interview, he said he was following whatever advice he was given without question. Similarly, M19 said that whether or not he trusts a healthcare professional is dependent on the medical problem:

> Well I mean would you trust them with your life? Or would you trust them you know, when you’ve got a bit of a cough? You know, there’s a bit of a difference. You can trust somebody to take a splinter out or whatever but ah, I mean, even if you’ve made some sensible comments, if you’re going to start playing around with anything serious, you know, brain or the heart or whatever, you’d like to know a bit more about it—you’d like to see him in action and...

The findings of M19 and M20 differ however; M20 (aged 62, lower SES) is more likely to trust in situations of risk whereas M19 (age 65, higher SES) is more likely to question the ability of his physician before trusting. However, the situation M19 is discussing is hypothetical, as opposed to M20’s which at the time of the interview was current. The suggestion that the medical circumstance affects both higher and lower SES participant’s blind or unquestioning behaviour is further substantiated by M17 (aged 68, higher SES). M17 did not initially follow the advice of his physicians.

However, his condition worsened significantly and became life-threatening. When asked if he questions his physician’s medical advice now that he has had complications he responded: ‘If they said ‘jump’ I’d say ‘how high?’’.

Similar to findings from primary prevention participants, age was a significant factor in participants questioning behaviour. Older secondary prevention participants trusted physicians because they had been raised with the perception that physicians were to be respected. For example, after allegedly being misdiagnosed, F8 (aged 71, lower SES) says she still trusts the GP who made the error because ‘okay you know your doctor’s not God but you’ve gotta admit they come pretty close to it. And ah… Yeah. And they can only really—I mean, they’re also human’. However, although she says she would trust the physician who made the error, her negative experience has made her more questioning of medical advice. The physician who misdiagnosed her is the only physician that works on Sundays and she said ‘If I was there every Sunday and he was there every Sunday, I’d be, probably make a little bit more responsibility and maybe give him a little bit more information’. She indicates that she now plays a more active role in the decision to trust.

Also similar to primary prevention findings, higher SES participants in secondary prevention were unanimously found to be reflexive with regard to medical decisions and trust in medical professionals. For example, F7 was uncertain about her trust and chose to seek out a:

> …good GP because I don’t just want a GP that takes your Medicare card, writes you a script and wants to get patients in and out. I really did look around for people that cared. So you know, the practice I go to, I trust, I trust most of the doctors there.
F7 said she has reservations about trusting all physicians so she specifically chose to see a physician she trusts. Unlike older participants who trust all physicians, she says that each of them individually needs to earn her trust. Similarly, M6 (aged 69, higher SES) said that he trusts his GP and cardiologist because they earned his trust. M6, similar to F2 and M3, noted that the relationship between the GP and patient is changing and he now plays an active role in medical decisions.

The most notable differences between participant groups with regard to blind trust were age and SES. Table 1 provides the actual number of participants, with regard to age and SES, who were identified as blindly trusting physicians based on the conceptual framework.

**DISCUSSION**

These data suggest that age and SES are significant factors affecting questioning behaviours in patients with established CD. Older lower SES participants are more likely than their younger counterparts to be unquestioning of medical advice. Additionally, higher SES participants are more likely to question medical advice; however, this is not to suggest that all lower SES participants are not questioning. One of the lower SES primary prevention participants (M7) was found to be unquestioning and F8 said that she became more questioning following an alleged misdiagnosis. Also central in the findings was that which suggested that unlike primary prevention participants, prognosis played a role in the secondary participants’ trust, or lack of questioning behaviour when it came to medical advice. Participants who perceived themselves at risk of a poor outcome were unlikely to express doubts about medical advice.

The suggestion in the literature that trust in healthcare is declining as the result of increased individual and societal questioning behaviour is evident in participants M2, F3 and M6’s discussions of the recent shift in physician–patient interactions. All three participants expressed the view that they are more active in medical decisions and more questioning of medical advice than previously. However, our findings indicate that this argument is not applicable to all physician–patient interactions.

Findings also suggest that for a proportion of the participants, medical advice remains unquestioned and blind trust ensues. Many of the older, and lower or more materially deprived social groups, blindly trust physicians, and in a sense want to be ‘told what to do’ in relation to their health and medical treatments. Consistent with our findings, research has identified factors such as social class and age shape the way lay people approach medical encounters and engage with medical information. This finding may be due to the fact that many of the lower SES participants have a greater social distance from medical professionals and therefore have an in-built power differential, and consequently are more likely than higher SES participants to comply without question. Many of the older participants, regardless of the level of prevention or SES, were raised respecting medical professionals, which was evident in their responses. They have generalised trust in physicians and do not necessarily consider whom they trust. These findings are supported by earlier research, which found that older patients are less likely to actively seek treatment from alternative therapies and are more likely to trust physicians. Despite the blind trust, F8’s responses to her alleged misdiagnosis suggests that trust may be undermined as the result of negative medical experiences which has implications for medical practice.

The interviews also identified that participants who perceive their prognosis to be uncertain blindly trust medical advice, regardless of their SES. However, similar findings have been suggested to indicate that rather than influencing blind trust, prognosis impacts patient’s vulnerability and level of dependence (inability to question) on medical professionals. Rather than blindly trusting, participants may be dependent, despite using the word ‘trust’. The notion of dependence, and the ways in which participants use and conceptualise the word ‘trust’ complement our discussions of variances in patient trust according to demographics. Further information regarding our theorising lay accounts of trust can be consulted at refs. 3 20 46 47.

The finding regarding patient blind trust in situations where their prognosis is uncertain is also consistent with the HBM. The HBM states that people are more likely to take health-related action if they have a positive expectation that by taking a recommended action, they will avoid a negative health condition (ie, death or a cardiovascular incident). Part of this positive expectation is a level of trust that their doctors will provide the appropriate recommended action.

Overall, the findings suggest that the level of trust in physicians varies according to age, SES and prognosis. Despite evidence to the contrary, blind trust in physicians remains strong in older participants, participants who perceive their prognosis to be uncertain and a proportion of lower SES participants. However, there are patients who will challenge medical advice and medical professionals need to be aware of the changing nature of physician–patient relationships.

**Table 1** Participant sample identified as blindly trusting physicians

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<th>Lower SES</th>
<th>Higher SES</th>
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<tr>
<td>Age &lt;70</td>
<td>4/6 blindly trust</td>
<td>3/15 blindly trust</td>
</tr>
<tr>
<td>Age &gt;70</td>
<td>10/12 blindly trust</td>
<td>0/4 blindly trust</td>
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**Practical implications**

Trust is an important component of the physician–patient relationship and is essential for patient uptake of...
medical advice. In their professional practice, physicians need to be aware that there are a growing proportion of patients for whom trust needs to be developed, and cannot be assumed. Our findings also highlight that there are a proportion of patients who blindly trust physicians. This is important for practitioners in terms of patient agency and points to the importance of moral and ethical practice. Despite an increase in lay access to information and alternate forms of treatment, medical professionals continue to be in a position of power which both entitles, and requires, them to provide ethical and moral care to patients.

Contributors
SBM was involved in the design, data collection, analysis and write-up of the research. PRW was involved in the design and write-up of the research. MJ contributed to the analysis and write-up of this research.

Competing interests
None.

Ethics approval
Flinders University Social and Behavioural Research Ethics Committee.

Provenance and peer review
Not commissioned; externally peer reviewed.

Data sharing statement
No additional data are available.

REFERENCES
Appendix 1: Does Prognosis and Socioeconomic status impact on Trust in doctors? 
Interviews in South Australia.

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<th>Question</th>
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<tr>
<td><strong>Dietary information</strong></td>
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<td>Who has given you with the dietary recommendations for your CD?</td>
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<tr>
<td>Have you ever doubted the dietary recommendations of your healthcare provider?</td>
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<tr>
<td>Who is providing you with the actual dietary information – e.g. food labeling, cardiac rehab nurses, dieticians, GP’s, internet, Australian food guide?</td>
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<tr>
<td>Have you ever doubted the information on dietary advice from anyone other than your healthcare professional?</td>
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| **Patient-physician relationship** |
| Who have you been meeting with to discuss your high cholesterol OR coronary heart disease? |
| How long have you been seeing your …. ? *(Whoever they are seeing)* |
| Can you share positive or negative experiences that you have had with healthcare providers? This does not necessarily have to be related to your high cholesterol/CHD. |
| Would you say that you ‘trust’ your… ? *(whoever they have been seeing about their health problems)* |
| Why yes or no? |
| If yes, have you ever doubted any of the health related information provided by your …? *(whoever they are seeing)* |
| If no, what are the contributing factors to your lack of trust? |
| Are there things your physician could do to improve your trust? |

| **Other sources of health information** |
| Where else do you get information about your health? |
| What would you say is the first source you turn to for health related information? |
| Which of these sources do you feel are reliable/trustworthy? Why? |